STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 123616

TO: Rei-Tsang Shiao **Location: 5a10 / 5c18** **Thursday, June 03, 2004** **Art Unit: 1626** **Phone: 272-0707** **Serial Number: 10 / 603953**	**From: Jan Delaval** **Location: Biotech-Chem Library** **Rem 1A51** **Phone: 272-2504** **jan.delaval@uspto.gov**

Search Notes

Jeff Delevan for search

Access DB# 123616

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Rhett (Rob) Shaw Examiner #: 7952 Date: 6/2/04
Art Unit: 1626 Phone Number 22-0707 Serial Number: 10/603,953
Mail Box and Bldg/Room Location: 5A10/5C18 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

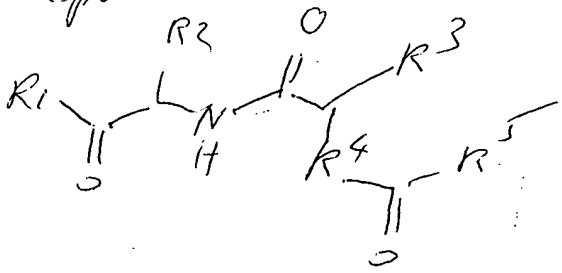
Title of Invention: Asymm catom

Inventors (please provide full names): Bowman et al

Earliest Priority Filing Date:

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

I. search cpd I



R_1 is indolinyl, indole, pyrrolyl, or imidazole (R, heterocycle or heterocyclyl)

R_2 & R_5 is sub. i.e. C, N, heterocycle, heterocyclyl.

II search method of use and process of making of cpd I.

STAFF USE ONLY

Searcher: Jen
Searcher Phone #: 22504
Searcher Location:
Date Searcher Picked Up: 6/3
Date Completed: 6/3
Searcher Prep & Review Time:
Clerical Prep Time: 20
Online Time: +65

PTO-1590 (8-01)

Type of Search

NA Sequence (#)
AA Sequence (#)
Structure (#) ✓
Bibliographic
Litigation
Fulltext
Patent Family
Other

Vendors and cost where applicable

STN ✓
Dialog
Questel/Orbit
Dr.Link
Lexis/Nexis
Sequence Systems
WWW/Internet
Other (specify)

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=> fil reg
FILE 'REGISTRY' ENTERED AT 12:25:55 ON 03 JUN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:    2 JUN 2004  HIGHEST RN 688737-01-1
DICTIONARY FILE UPDATES:   2 JUN 2004  HIGHEST RN 688737-01-1

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> d sta que l56
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                 122519-30-6/BI OR 13734-41-3/BI OR 141969-52-0/BI OR 141969-53-
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                 2528-61-2/BI OR 2687-43-6/BI OR 3392-09-4/BI OR 3392-12-9/BI
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L26               STR
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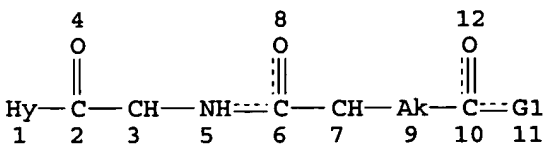


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VAR G1=N/O/HY
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  12

STEREO ATTRIBUTES: NONE
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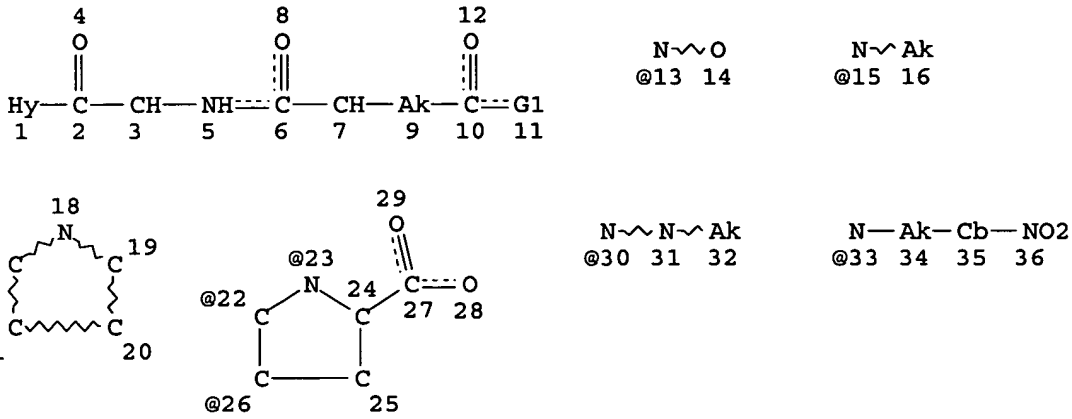
L31 1 SEA FILE=REGISTRY ABB=ON PLU=ON L21 AND L28
L32 STR



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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 43

STEREO ATTRIBUTES: NONE
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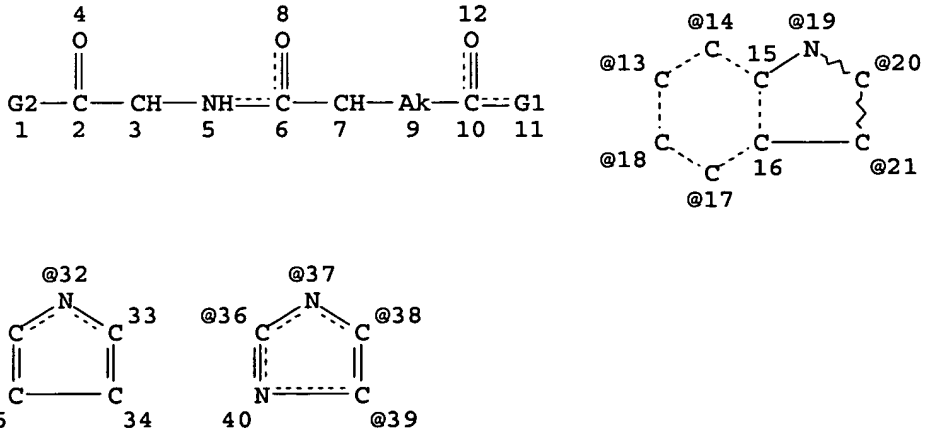
L36 STR



VAR G1=N/O/HY
VAR G2=32/31/35/37/36/38/14/13/18/17/21/20/19/39

NODE ATTRIBUTES:
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

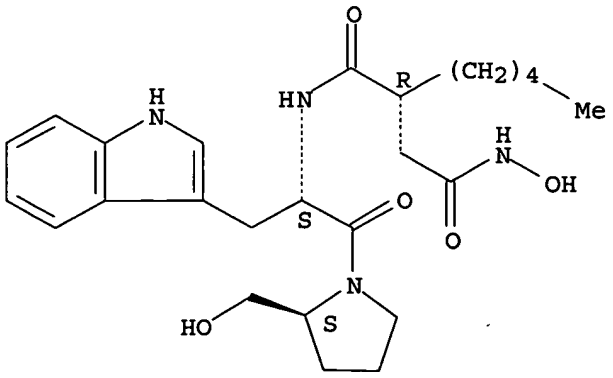
GRAPH ATTRIBUTES:
RSPEC 13 31 36
NUMBER OF NODES IS 31

STEREO ATTRIBUTES: NONE
L38 32 SEA FILE=REGISTRY SUB=L34 SSS FUL L36
L53 28 SEA FILE=REGISTRY ABB=ON PLU=ON L38 NOT (C20H25N3O6 OR C25H26N2O6S OR C27H30N2O6 OR C33H48N4O10)
L54 12 SEA FILE=REGISTRY ABB=ON PLU=ON L53 AND (C35H38N4O6 OR C30H39N3O7 OR C33H43N3O7 OR C31H33N3O4 OR C32H35N3O4 OR C31H41N3O7 OR C36H40N2O4 OR C37H42N2O4 OR C36H40N2O4 OR C37H42N2O4 OR C36H41N3O4 OR C37H43N3O4 OR C33H37N3O7)
L55 16 SEA FILE=REGISTRY ABB=ON PLU=ON L53 NOT L54
L56 17 SEA FILE=REGISTRY ABB=ON PLU=ON (L31 OR L55)

=> d ide can tot l56

L56 ANSWER 1 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **460754-50-1** REGISTRY
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-2-pentyl-, (2R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H36 N4 O5
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

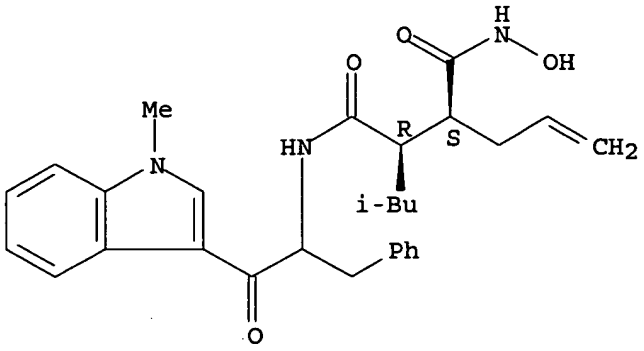
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:247930

L56 ANSWER 2 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 250152-85-3 REGISTRY

CN Butanediamide, N4-hydroxy-N1-[2-(1-methyl-1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H35 N3 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.



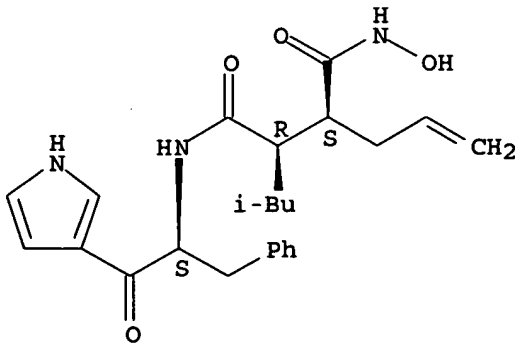
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:336941

L56 ANSWER 3 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 220690-80-2 REGISTRY
CN Butanediamide, N4-hydroxy-2-(2-methylpropyl)-N1-[(1R)-2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-3-yl)ethyl]-3-(2-propenyl)-, (2S,3R)-rel- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H31 N3 O4
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); USES (Uses)

Relative stereochemistry.



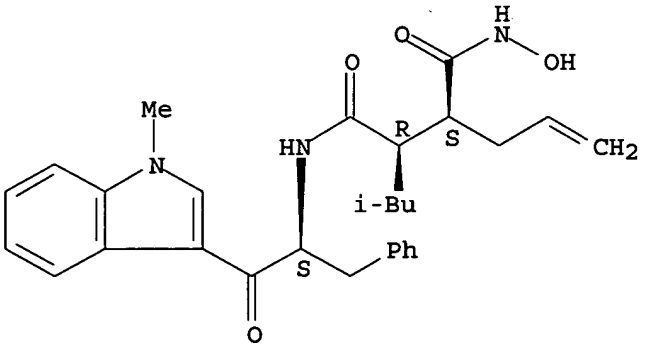
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 130:191422

L56 ANSWER 4 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 220690-78-8 REGISTRY
CN Butanediamide, N4-hydroxy-N1-[(1R)-2-(1-methyl-1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2S,3R)-rel- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H35 N3 O4
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); USES (Uses)

Relative stereochemistry.



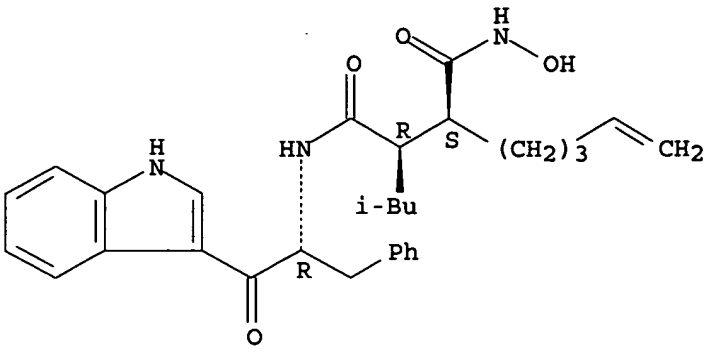
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 130:191422

L56 ANSWER 5 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210711-94-7 REGISTRY
CN Butanediamide, N4-hydroxy-N1-[(1R)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(4-pentenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H37 N3 O4
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.



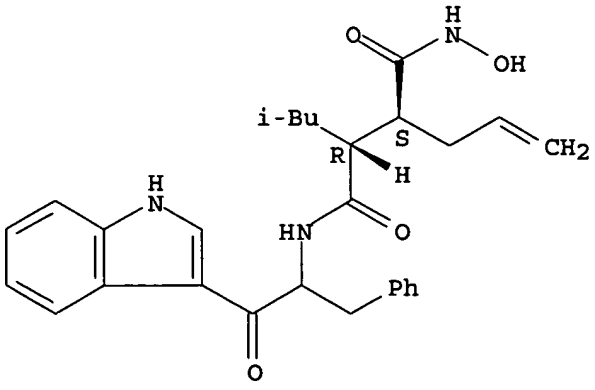
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:149247

L56 ANSWER 6 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210711-81-2 REGISTRY
CN Butanediamide, N4-hydroxy-N1-[2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H33 N3 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

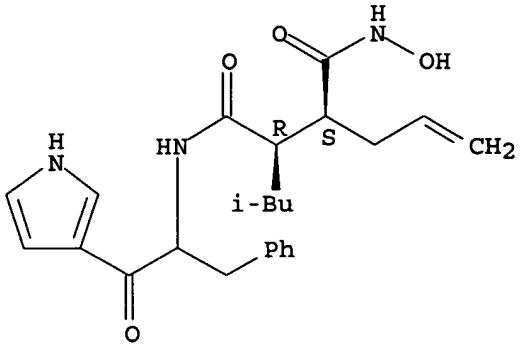
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:336941

REFERENCE 2: 129:149247

L56 ANSWER 7 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210711-17-4 REGISTRY
CN Butanediamide, N4-hydroxy-2-(2-methylpropyl)-N1-[2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-3-yl)ethyl]-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H31 N3 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.



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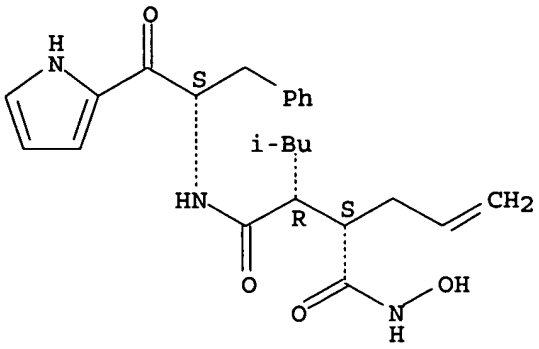
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:336941

REFERENCE 2: 129:149247

L56 ANSWER 8 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210711-13-0 REGISTRY
CN Butanediamide, N4-hydroxy-2-(2-methylpropyl)-N1-[(1S)-2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-2-yl)ethyl]-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H31 N3 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); USES (Uses)

Absolute stereochemistry.



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3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

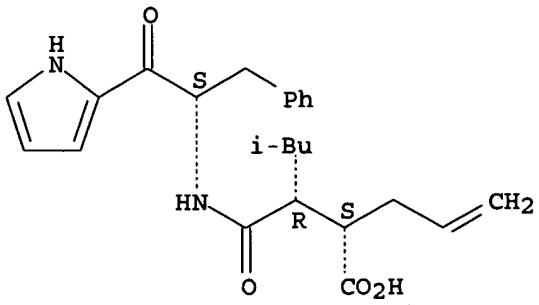
REFERENCE 1: 131:336941

REFERENCE 2: 130:191422

REFERENCE 3: 129:149247

L56 ANSWER 9 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210711-12-9 REGISTRY
CN Hexanoic acid, 5-methyl-3-[[[(1S)-2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-2-yl)ethyl]amino]carbonyl]-2-(2-propenyl)-, (2S,3R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H30 N2 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:336941

REFERENCE 2: 129:149247

L56 ANSWER 10 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210711-03-8 REGISTRY
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1-methyl-1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H35 N3 O4
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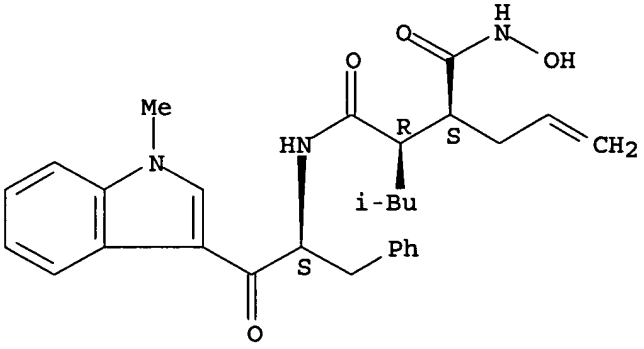
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.



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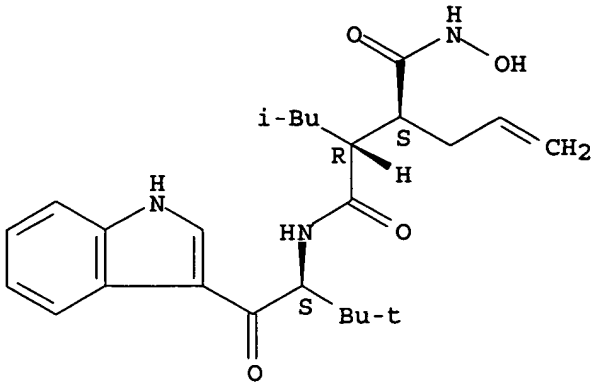
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:149247

L56 ANSWER 11 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210710-94-4 REGISTRY
CN Butanediamide, N4-hydroxy-N1-[(1S)-1-(1H-indol-3-ylcarbonyl)-2,2-dimethylpropyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H35 N3 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); USES (Uses)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:336941

REFERENCE 2: 130:191422

REFERENCE 3: 129:149247

L56 ANSWER 12 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
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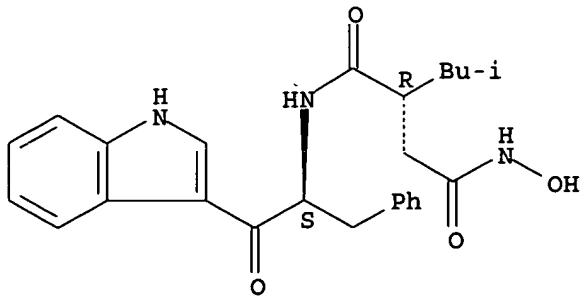
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-, (2R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H29 N3 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); USES (Uses)

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:336941

REFERENCE 2: 130:191422

REFERENCE 3: 129:149247

L56 ANSWER 13 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210710-86-4 REGISTRY
CN Hexanoic acid, 3-[[[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-5-methyl-, (3R)- (9CI) (CA INDEX NAME)
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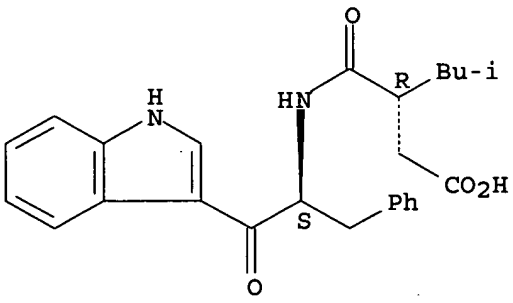
MF C25 H28 N2 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

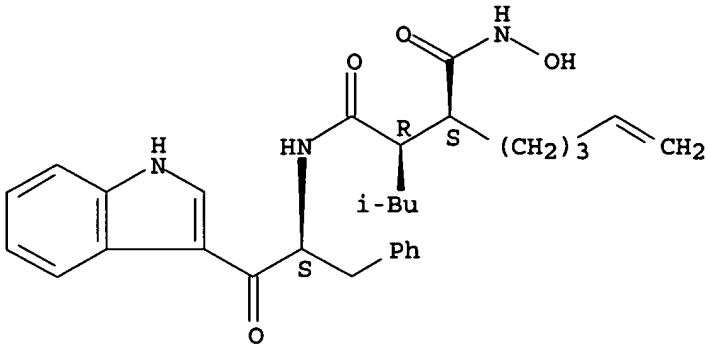
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:336941

REFERENCE 2: 129:149247

L56 ANSWER 14 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210710-83-1 REGISTRY
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(4-pentenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H37 N3 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

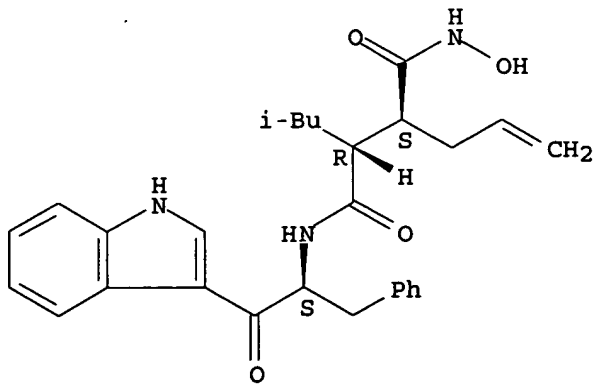
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:336941

REFERENCE 2: 129:149247

L56 ANSWER 15 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210710-80-8 REGISTRY
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H33 N3 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); USES (Uses)

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

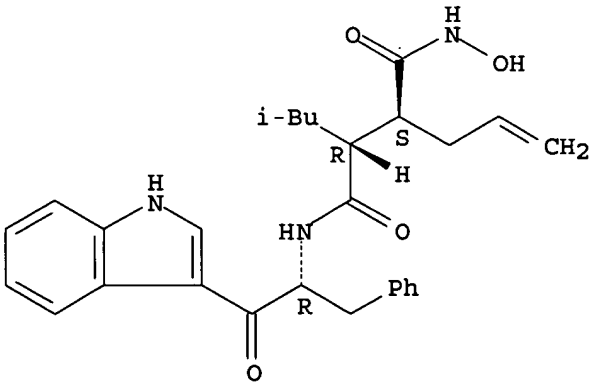
REFERENCE 1: 131:336941

REFERENCE 2: 130:191422

REFERENCE 3: 129:149247

L56 ANSWER 16 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210710-79-5 REGISTRY
CN Butanediamide, N4-hydroxy-N1-[(1R)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H33 N3 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

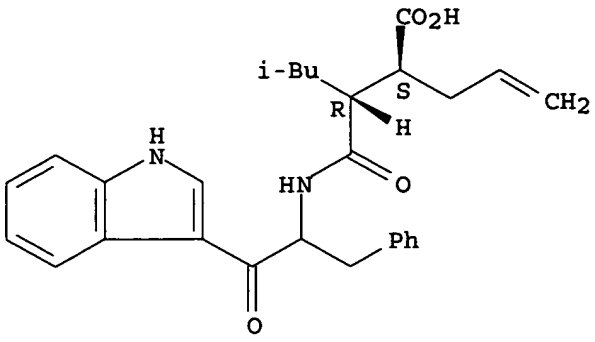
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:336941

REFERENCE 2: 129:149247

L56 ANSWER 17 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN 210710-78-4 REGISTRY
CN Hexanoic acid, 3-[[[2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-5-methyl-2-(2-propenyl)-, (2S,3R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H32 N2 O4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:336941

REFERENCE 2: 129:149247

=> d his

(FILE 'HOME' ENTERED AT 11:25:23 ON 03 JUN 2004)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 11:25:32 ON 03 JUN 2004
L1 1 S (US20040019083 OR US6660741)/PN OR (WO2002-US8387 OR US2001-2
E BORNMAN W/AU
L2 3 S E4,E5
L3 95 S E39-E44
E SIROTNAK F/AU
L4 266 S E4-E10
E SCHER H/AU
L5 139 S E3-E6,E15,E16
E VIDAL E/AU
L6 36 S E3-E5,E12-E14
E SOMBRITO/AU
E EPHRAIM/AU
E BORELLE C/AU
E BORELL C/AU
L7 7 S E4-E6
E BOREL C/AU
L8 56 S E3,E6,E7,E11
E BORELE/AU
E SCHEINBERG D/AU
L9 112 S E3-E6
L10 167 S ACTINONIN#

FILE 'REGISTRY' ENTERED AT 11:35:02 ON 03 JUN 2004
L11 1 S ACTINONIN/CN
E C19H35N3O5/MF
L12 12 S E3 AND NC4/ES AND 1/NR
L13 4 S L12 AND PENTYL
L14 4 S L11,L13
L15 3 S L14 NOT 56384-19-1
L16 3 S L11,L15
SEL RN

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L17           0 S E1-E3/CRN

     FILE 'HCAPLUS' ENTERED AT 11:38:43 ON 03 JUN 2004
L18         109 S L16
L19           7 S L2-L9 AND L10,L18
L20           7 S L1,L19
              SEL RN

     FILE 'REGISTRY' ENTERED AT 11:39:45 ON 03 JUN 2004
L21          67 S E4-E70
L22          66 S L21 NOT L16
L23          57 S L22 AND NR>=1 AND N/ELS
L24          49 S L23 AND O>=3
L25          48 S L24 NOT C4H5NO3
L26             STR
L27          50 S L26
L28      631229 S (333.151.57 OR 333.151.54 OR 16.136.9 OR 16.195.24)/RID  NOT
L29           6 S L26 SAM SUB=L28
L30         173 S L26 FUL SUB=L28
                SAV L30 SHIAO603/A
L31           1 S L21 AND L28
L32             STR L26
L33           7 S L32 SAM SUB=L30
L34         120 S L32 FUL SUB=L30
                SAV L34 SHIAO603A/A
L35             STR L26
L36             STR L35
L37           4 S L36 SAM SUB=L34
L38          32 S L36 FUL SUB=L34
                SAV L38 SHIAO603B/A
L39          33 S L31,L38
L40          87 S L34 NOT L39
L41           3 S L40 AND (GASTRIN OR KINASE OR MYCOPLAN?)
L42           6 S L40 AND (C100H166N34O34 OR C150H219N33O47 OR C70H96N16O20 OR
L43          78 S L40 NOT L41,L42

     FILE 'HCAPLUS' ENTERED AT 12:10:01 ON 03 JUN 2004
L44          10 S L39
L45          82 S L43
L46           3 S L44 AND L45
L47          10 S L44,L46
L48           1 S L2-L9 AND L44
L49           0 S L2-L9 AND L45
L50           1 S L44,L45 AND L10,L18
L51           1 S L48,L50
L52          10 S L47 AND (PD<=20010319 OR PRD<=20010319 OR AD<=20010319)

     FILE 'REGISTRY' ENTERED AT 12:13:44 ON 03 JUN 2004
L53          28 S L38 NOT (C20H25N3O6 OR C25H26N2O6S OR C27H30N2O6 OR C33H48N4O
L54          12 S L53 AND (C35H38N4O6 OR C30H39N3O7 OR C33H43N3O7 OR C31H33N3O4
L55          16 S L53 NOT L54
L56          17 S L31,L55

     FILE 'HCAOLD' ENTERED AT 12:24:58 ON 03 JUN 2004
L57           0 S L56

     FILE 'HCAPLUS' ENTERED AT 12:25:01 ON 03 JUN 2004
L58           4 S L56
L59           1 S L58 AND L1-L10,L18
L60           4 S L58,L59

     FILE 'USPATFULL, USPAT2' ENTERED AT 12:25:29 ON 03 JUN 2004
L61           4 S L56
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FILE 'REGISTRY' ENTERED AT 12:25:55 ON 03 JUN 2004

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 12:26:09 ON 03 JUN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 3 Jun 2004 VOL 140 ISS 23
FILE LAST UPDATED: 2 Jun 2004 (20040602/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

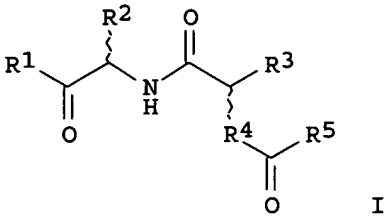
=> d l60 all hitstr tot

L60 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:736021 HCAPLUS
DN 137:247930
ED Entered STN: 27 Sep 2002
TI Asymmetric synthesis of (S,S,R)-(-)-**actinonin** and its analogs
IN **Bornman, William G.; Sirotnak, Francis M.; Scher, Howard; Vidal, Ephraim; Scheinberg, David;** Borella, Christopher
PA Sloan Kettering Institute for Cancer Research, USA
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT Patent
LA English
ICI C07
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002074050	A2	20020926	WO 2002-US8387	20020319 <--
	WO 2002074050	A3	20030227		
	W: AZ, BB, BG, CA, CU, CZ, EE, GB, GH, HU, IL, KG, KR, LK, LU, MG, MW, NZ, RO, RU, YU, ZA, BY, KG, MD, RU, TJ, TM				
	RW: BF, BJ, CI, CM, GN, ML, NR, SN, TD, TG				
	US 2002198156	A1	20021226	US 2002-102593	20020319 <--
	US 6660741	B2	20031209		
	EP 1372692	A2	20040102	EP 2002-725239	20020319 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2004019083	A1	20040129	US 2003-603953	20030625 <--
PRAI	US 2001-277116P	P	20010319 <--		
	US 2002-102593	A3	20020319		
	WO 2002-US8387	W	20020319 <--		

OS CASREACT 137:247930; MARPAT 137:247930

GI



I

AB The analogs of (S,S,R)-(-)-**actinonin** I [R1 = an optionally substituted or halogenated alkyl, aryl, heteroalkyl or heteroaryl amine, a cycle or bicycle; R2 = Me, Et, n-Pr, tert-Bu, Ph, 3,4-dichlorophenyl, biphenyl, benzyl, 4-hydroxybenzyl, piperidine, N-Boc-4-piperidine, CH2-(N-Boc-4-piperidine), 4-tetrahydropyran, CH2-4-tetrahydropyran, 3-Me indolyl, 2-naphthyl, 3-pyridyl, 4-pyridyl, 3-thienyl; R3 = R2 or alkyl; R4 = alkyl; R5 = NH2, OH, NHOH, NHOMe, N(Me)OH, N(Me)OCH3, NHEt, NHCH2(2,4OMe2Ph), NHCH2(4-NO2)Ph, NHNMe2, proline, or 2-hydroxymethyl pyrrolidine, Boc = tert-butoxycarbonyl] were prepared as antitumor agents. Thus, N4-hydroxy-N1-(1-(2-hydroxymethyl-pyrrolidine-1-carbonyl)-3-methyl-butyl)-2-pentyl-succinamide was prepared by coupling of protected pseudopeptide composed of L-prolinol and L-leucine, with hydroxysuccinamide and O-benzylhydroxyamine hydrochloride and is effective at inhibiting cell growth.

ST **actinonin** deriv asym synthesis tumor cell growth inhibitor; antitumor agent **actinonin** analog asym synthesis cytotoxicity

IT Leukemia
(acute myelogenous; asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

IT Lung, neoplasm
(adenoacanthoma; asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

IT Antitumor agents
Asymmetric synthesis and induction
Cytotoxicity
Human
Neoplasm
(asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

IT Mammary gland, neoplasm
Ovary, neoplasm
Prostate gland, neoplasm
(carcinoma; asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

IT Cell proliferation
(inhibition; asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

IT Neck, anatomical
(neoplasm, squamous cell carcinoma; asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

IT Lung, neoplasm
(non-small-cell carcinoma; asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

IT Head, neoplasm
Lung, neoplasm
(squamous cell carcinoma; asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

IT 460754-59-0P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

IT **13434-13-4P, Actinonin** 141969-52-0P 141969-53-1P
460754-40-9P 460754-47-6P 460754-48-7P 460754-49-8P
460754-50-1P 460754-51-2P 460754-52-3P 460754-53-4P
460754-54-5P 460754-55-6P 460754-56-7P 460754-57-8P 460754-58-9P
460754-60-3P 460754-61-4P 460754-62-5P 460754-63-6P 460754-64-7P
460754-65-8P 460754-66-9P 460754-67-0P 460754-68-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

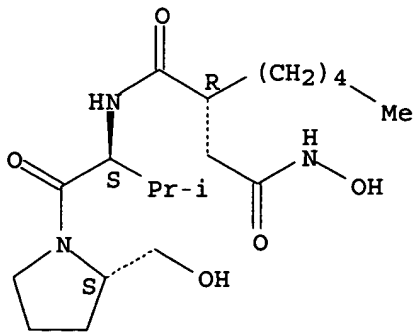
IT 2528-61-2, Heptanoyl chloride 2687-43-6 3392-09-4 5292-43-3, tert-Butyl bromoacetate 6066-82-6, N-Hydroxysuccinimide 13734-41-3 23356-96-9 103723-70-2, 4-Isopropyl-oxazolidin-2-one 117607-13-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

IT 3392-12-9P 89597-97-7P 122501-59-1P 122519-30-6P 145588-98-3P
460754-27-2P 460754-28-3P 460754-29-4P 460754-30-7P 460754-31-8P
460754-32-9P 460754-33-0P 460754-34-1P 460754-35-2P 460754-36-3P
460754-37-4P 460754-38-5P 460754-39-6P 460754-41-0P 460754-42-1P
460754-43-2P 460754-44-3P 460754-45-4P 460754-46-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

IT **13434-13-4P, Actinonin 460754-50-1P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(asym. synthesis of analogs and derivs. of **actinonin** as tumor cell growth inhibitors)

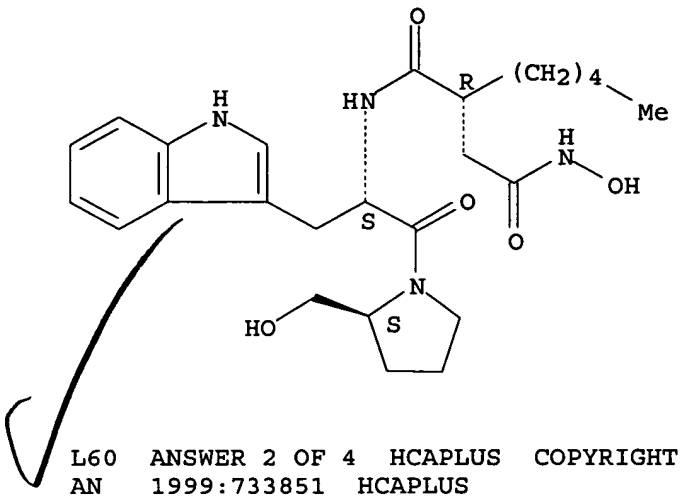
RN 13434-13-4 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-1-[[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]carbonyl]-2-methylpropyl]-2-pentyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 460754-50-1 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-2-pentyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L60 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:733851 HCAPLUS
DN 131:336941
ED Entered STN: 18 Nov 1999
TI Preparation of [(aroylalkyl)amino]succinylhydroxamic acids and analogs as inhibitors of matrix metalloproteinases and TNFα secretion
IN Davidsen, Steven K.; Florjancic, Alan S.; Sheppard, George S.; Giesler, Jamie R.; Xu, Lianhong; Guo, Yan; Curtin, Michael L.; Michaelides, Michael R.; Wada, Carol K.; Holms, James H.
PA Abbott Laboratories, USA
SO U.S., 67 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM C07C259-10
ICS A61K031-165
NCL 514419000
CC 27-11 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5985911	A	19991116	US 1997-992578	19971217
PRAI	US 1997-35781P	P	19970107		

OS MARPAT 131:336941
AB RCOCR1R2CHR3CONHCR4R5C(:X)R6 [I; R = NHOH or OH; R1,R4 = H or alkyl; R2 = H, OH, alk(en)yl, alkoxy, etc.; R3 = alk(en)yl, phenyl(alkyl), etc.; R5 = alkyl, Ph, etc.; R6 = alkyl, Ph, heteroaryl, etc.; X = O or NOR1] were prepared Thus, indole was acylated by L-MeO2CNHCH(CH2Ph)CO2H and the N-deprotected product amidated by (S,S)-RCOCHR2CHR3COR7 (R2 = CH2CH:CH2, R3 = CH2Ph)(II; R = OCMe3, R7 = OC6F5) to give II [R7 = NHCH(CH2Ph)COR6, R6 = 3-indolyl](III; R = OCMe3) which was converted in 2 steps to III (R = NHOH). Data for biol. activity of I were given.
ST succinylhydroxamate aroylalkylamino prepn matrix metalloproteinase TNFalpha inhibitor
IT Connective tissue
(disease, treatment; preparation of [(aroylalkyl)amino]succinylhydroxamic acids and analogs as inhibitors of matrix metalloproteinases and TNFα secretion)
IT Tumor necrosis factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(mediated disorders; treatment; preparation of [(aroylalkyl)amino]succinylhydroxamic acids and analogs as inhibitors of matrix metalloproteinases and TNFα secretion)
IT 141907-41-7, Matrix metalloproteinase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(mediated disorders; treatment; preparation of [(aroylalkyl)amino]succinylhydroxamic acids and analogs as inhibitors of matrix metalloproteinases and TNFα secretion)

IT **210710-79-5P 210710-80-8P 210710-83-1P**
210710-85-3P **210710-86-4P 210710-88-6P** 210710-89-7P
210710-90-0P 210710-92-2P **210710-94-4P** 210710-96-6P
210710-97-7P 210710-98-8P 210710-99-9P 210711-00-5P 210711-02-7P
210711-04-9P 210711-05-0P 210711-07-2P 210711-08-3P
210711-13-0P 210711-15-2P **210711-17-4P** 210711-19-6P
210711-22-1P 210711-24-3P 210711-30-1P 210711-31-2P 210711-37-8P
210711-40-3P 210711-42-5P 210711-46-9P 210711-47-0P 210711-48-1P
210711-49-2P 210711-54-9P 210711-55-0P 210711-56-1P 210711-57-2P
210711-63-0P 210711-64-1P 210711-67-4P 210711-70-9P 210711-73-2P
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210711-81-2P 210711-85-6P 210711-89-0P 210711-90-3P
210711-91-4P **250152-85-3P** 250152-86-4P 250152-87-5P
250152-88-6P 250152-89-7P 250152-90-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of [(aroylalkyl)amino]succinylhydroxamic acids and analogs as inhibitors of matrix metalloproteinases and TNFα secretion)

IT 63-91-2, L-Phenylalanine, reactions 67-63-0, 2-Propanol, reactions 95-54-5, o-Phenylenediamine, reactions 100-39-0, Benzyl bromide 106-38-7, 4-Bromotoluene 107-18-6, 2-Propen-1-ol, reactions 108-30-5, reactions 108-86-1, Bromobenzene, reactions 109-97-7, Pyrrole 120-72-9, Indole, reactions 288-42-6, Oxazole 288-47-1, Thiazole 578-57-4, 2-Bromoanisole 591-51-5, Phenyllithium 591-80-0, 4-Pentenoic acid 626-55-1, 3-Bromopyridine 627-15-6, 1,3-Dibromo-1-propene 646-07-1, 4-Methylvaleric acid 771-61-9, Pentafluorophenol 928-90-5, 5-Hexyn-1-ol 1119-51-3, 5-Bromo-1-pentene 2177-63-1 2462-32-0, Phenylalanine benzyl ester hydrochloride 2675-79-8, 3,4,5-Trimethoxybromobenzene 2687-43-6, O-Benzylhydroxylamine hydrochloride 2786-07-4, 2-Thienyllithium 3972-65-4, 4-Bromo-tert-butylbenzene 4392-24-9, Cinnamyl bromide 5162-44-7, 4-Bromo-1-butene 5292-21-7, Cyclohexylacetic acid 5292-43-3, tert-Butyl bromoacetate 6915-15-7, Malic acid 7766-51-0, 4-Iodo-1-butene 10365-98-7, 3-Methoxyphenylboronic acid 13734-34-4 20859-02-3, L-tert-Leucine 31600-88-1 37736-82-6 47375-34-8 51987-73-6 78887-39-5, 3-Acetamidophenylboronic acid 87630-35-1, 1-Triisopropylsilylpyrrole 90719-32-7, (S)-4-Benzyl-2-oxazolidinone 157518-71-3 179533-97-2 191849-93-1 210711-68-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of [(aroylalkyl)amino]succinylhydroxamic acids and analogs as inhibitors of matrix metalloproteinases and TNFα secretion)

IT 777-93-5P, 5-(4-Methylphenyl)pentanoic acid 3882-09-5P 13590-42-6P
14825-82-2P 36979-87-0P 38136-29-7P, 4-Methylvaleroyl chloride
41844-91-1P 83541-68-8P 85613-64-5P 87630-36-2P 95437-43-7P
100388-65-6P 101224-43-5P 103437-52-1P 111138-83-1P 112245-04-2P
113543-30-9P 131150-35-1P 131150-39-5P 143390-24-3P 144287-83-2P
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250152-91-1P 250152-93-3P 250152-94-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of [(aroylalkyl)amino]succinylhydroxamic acids and analogs as inhibitors of matrix metalloproteinases and TNFα secretion)

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; WO 9102716 1991 HCAPLUS
(2) Anon; EP 0489577 1992 HCAPLUS
(3) Anon; EP 0498665 1992 HCAPLUS
(4) Anon; WO 9213831 1992 HCAPLUS
(5) Anon; EP 0575844 1993 HCAPLUS
(6) Anon; WO 9324449 1993 HCAPLUS
(7) Anon; WO 9402446 1994 HCAPLUS
(8) Anon; WO 9402447 1994 HCAPLUS
(9) Anon; WO 9410990 1994 HCAPLUS
(10) Anon; WO 9421612 1994 HCAPLUS
(11) Anon; WO 9422309 1994 HCAPLUS
(12) Anon; WO 9424140 1994 HCAPLUS
(13) Anon; WO 9425435 1994 HCAPLUS
(14) Anon; WO 9504735 1995 HCAPLUS
(15) Anon; WO 9506031 1995 HCAPLUS
(16) Anon; WO 9519956 1995 HCAPLUS
(17) Anon; WO 9519961 1995 HCAPLUS
(18) Anon; WO 9522966 1995 HCAPLUS
(19) Anon; WO 9523790 1995 HCAPLUS
(20) Anon; WO 9529892 1995 HCAPLUS
(21) Anon; WO 9532944 1995 HCAPLUS
(22) Anon; WO 9616027 1996 HCAPLUS
(23) Anon; WO 9616931 1996 HCAPLUS
(24) Anon; WO 9633161 1996 HCAPLUS
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(26) Anon; Nature 1994, V370, P218
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(28) Anon; Nature 1994, V370, P558
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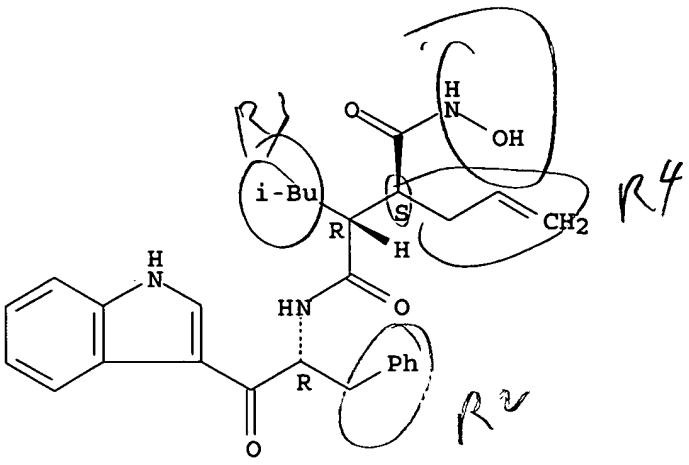
(33) Isomura; US 5442110 1995 HCAPLUS
(34) Porter; US 5300501 1994 HCAPLUS
(35) Short, F; J Heterocycl Chem 1969, V6(5), P707 HCAPLUS

IT **210710-79-5P 210710-80-8P 210710-83-1P**
210710-86-4P 210710-88-6P 210710-94-4P
210711-13-0P 210711-17-4P 210711-81-2P
250152-85-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of [(aroylalkyl)amino]succinylhydroxamic acids and analogs as inhibitors of matrix metalloproteinases and TNFα secretion)

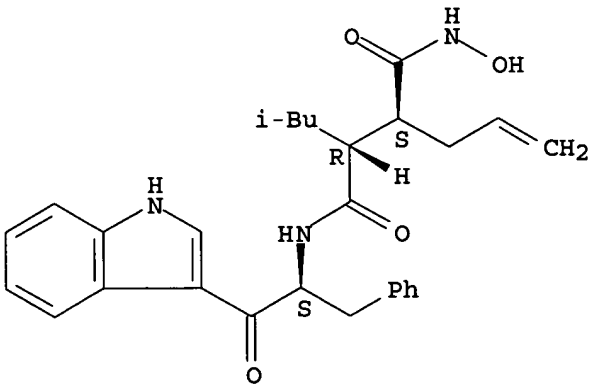
RN 210710-79-5 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1R)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



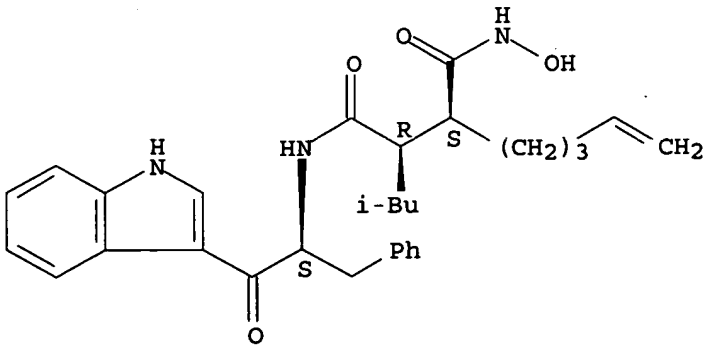
RN 210710-80-8 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 210710-83-1 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(4-pentenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

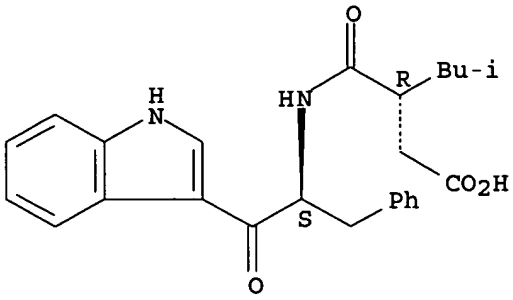
Absolute stereochemistry. Rotation (-).



RN 210710-86-4 HCAPLUS
CN Hexanoic acid, 3-[[[(1S)-2-(1H-indol-3-yl)-2-oxo-1-

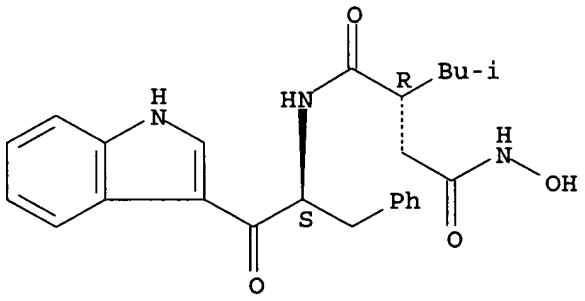
(phenylmethyl)ethyl]amino]carbonyl]-5-methyl-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



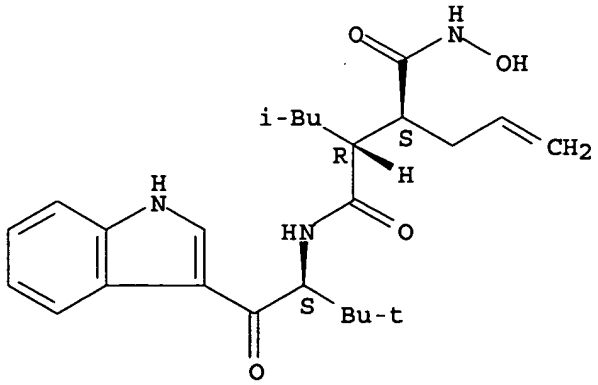
RN 210710-88-6 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 210710-94-4 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-1-(1H-indol-3-ylcarbonyl)-2,2-dimethylpropyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

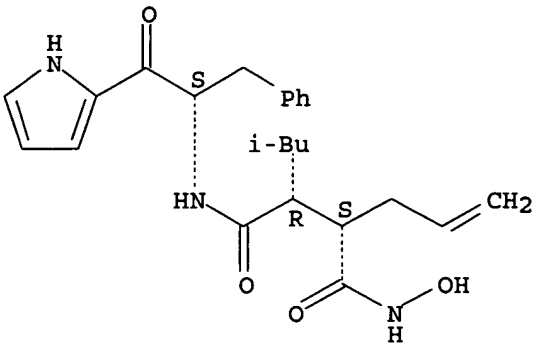
Absolute stereochemistry.



RN 210711-13-0 HCAPLUS
CN Butanediamide, N4-hydroxy-2-(2-methylpropyl)-N1-[(1S)-2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-2-yl)ethyl]-3-(2-propenyl)-, (2R,3S)- (9CI)

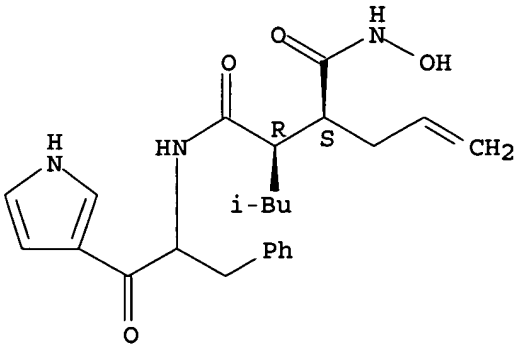
(CA INDEX NAME)

Absolute stereochemistry.



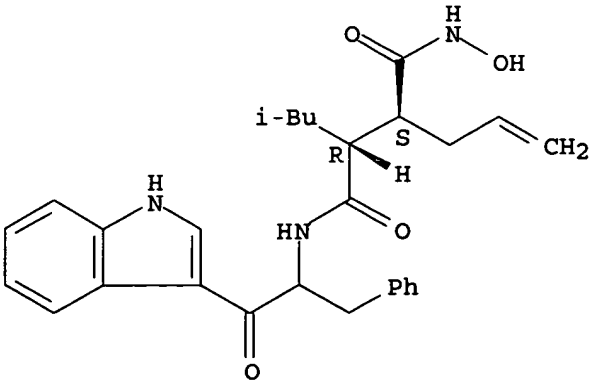
RN 210711-17-4 HCAPLUS
CN Butanediamide, N4-hydroxy-2-(2-methylpropyl)-N1-[2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-3-yl)ethyl]-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 210711-81-2 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

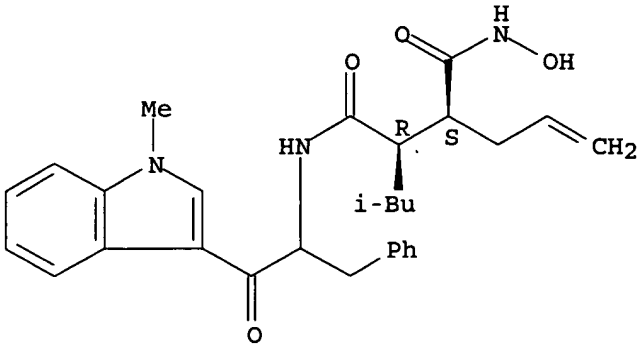
Absolute stereochemistry.



RN 250152-85-3 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[2-(1-methyl-1H-indol-3-yl)-2-oxo-1-

(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

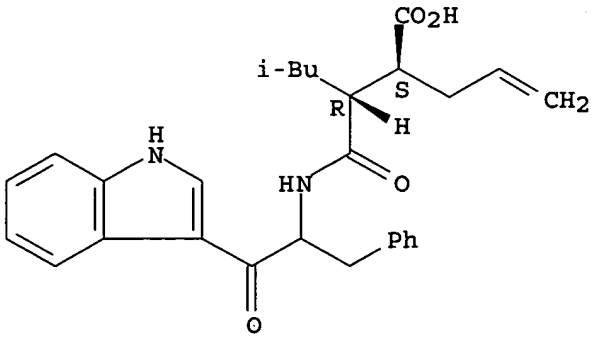
Absolute stereochemistry.



IT **210710-78-4P 210711-12-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of [(aroylalkyl)amino]succinylhydroxamic acids and analogs as inhibitors of matrix metalloproteinases and TNFα secretion)

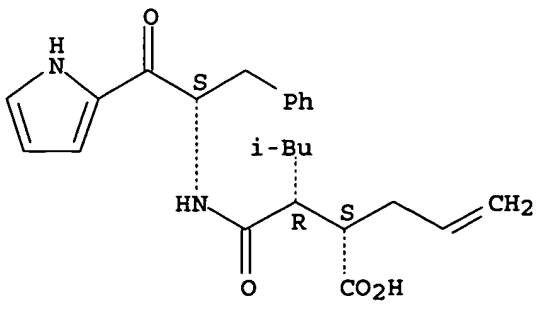
RN 210710-78-4 HCAPLUS
CN Hexanoic acid, 3-[[[2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-5-methyl-2-(2-propenyl)-, (2S,3R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

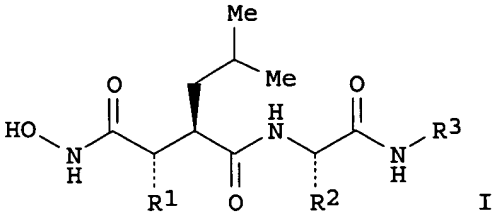


RN 210711-12-9 HCAPLUS
CN Hexanoic acid, 5-methyl-3-[[[(1S)-2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-2-yl)ethyl]amino]carbonyl]-2-(2-propenyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L60 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:1284 HCAPLUS
DN 130:191422
ED Entered STN: 04 Jan 1999
TI Aryl ketones as novel replacements for the C-terminal amide bond of succinyl hydroxamate MMP inhibitors
AU Sheppard, George S.; Florjancic, Alan S.; Giesler, Jamie R.; Xu, Lianhong; Guo, Yan; Davidsen, Steven K.; Marcotte, Patrick A.; Elmore, Ildiko; Albert, Daniel H.; Magoc, Terrance J.; Bouska, Jennifer J.; Goodfellow, Carole L.; Morgan, Douglas W.; Summers, James B.
CS Cancer Research Area, Department 47J, Abbott Laboratories, Abbott Park, IL, 60064, USA
SO Bioorganic & Medicinal Chemistry Letters (1998), 8(22), 3251-3256
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier Science Ltd.
DT Journal
LA English
CC 1-3 (Pharmacology)
GI



I

AB A series of succinyl hydroxamate MMP inhibitors (I) were prepared incorporating an aryl amino ketone moiety in place of the more typical C-terminal amino acid amides. Compds. of the C-terminal ketone series displayed potent inhibition of MMPs. Several compds. of the series were shown to be orally bioavailable.

ST succinyl hydroxamate matrix metalloproteinase inhibitor

IT Drug bioavailability
(activity and bioavailability of succinyl hydroxamate matrix metalloproteinase inhibitors)

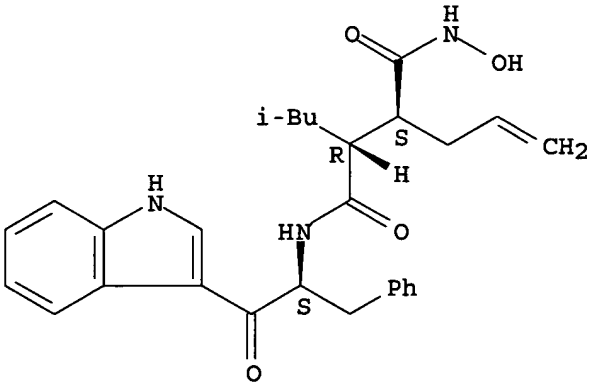
IT Structure-activity relationship
(matrix metalloproteinase-inhibiting; activity and bioavailability of succinyl hydroxamate matrix metalloproteinase inhibitors)

IT 130370-60-4, Bb 94 147783-67-3 154039-60-8, Bb 2516 210483-50-4
210483-51-5 210483-53-7 210483-68-4 210483-79-7 210483-82-2
210483-92-4 210484-00-7 **210710-80-8** 210710-85-3
210710-88-6 **210710-94-4** 210710-98-8 210711-00-5
210711-04-9 210711-05-0 **210711-13-0** **220690-78-8**
220690-80-2 220690-85-7 220690-87-9 220690-88-0
220690-89-1 220690-90-4 220690-93-7
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(activity and bioavailability of succinyl hydroxamate matrix metalloproteinase inhibitors)

IT 141907-41-7, Matrix metalloproteinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibitors; activity and bioavailability of succinyl hydroxamate matrix metalloproteinase inhibitors)

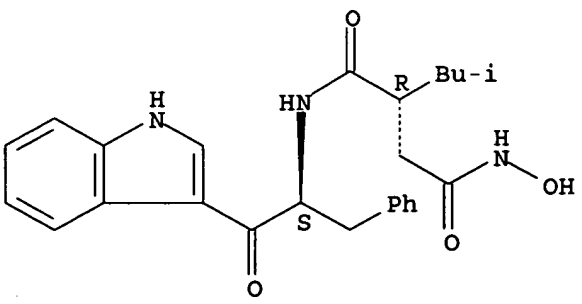
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Davidson, A; Chem Ind 1997, V3, P258
(2) Fairlie, D; Curr Med Chem 1995, V2, P654 HCAPLUS
(3) Florjancic, A; manuscript in preparation
(4) Hajduk, P; J Am Chem Soc 1997, V119, P5818 HCAPLUS
(5) Olejniczak, E; J Am Chem Soc 1997, V119, P5828 HCAPLUS
(6) Powell, W; Curr Top Microbiol Immunol 1996, V213, P1 HCAPLUS
(7) Sheppard, G; J Med Chem 1994, V37, P2011 HCAPLUS
(8) Steinman, D; Bioorg Med Chem Lett 1998, V8, P2087 HCAPLUS
(9) Watson, S; Bio Drugs 1998, V9, P325 HCAPLUS
(10) White, A; Curr Pharm Design 1997, V3, P45 HCAPLUS
(11) Xue, C; J Med Chem 1998, V41, P1745 HCAPLUS
(12) Ye, Q; Biochemistry 1992, V31, P11231 HCAPLUS
(13) Zask, A; Curr Pharm Design 1996, V2, P624 HCAPLUS
IT **210710-80-8 210710-88-6 210710-94-4**
210711-13-0 220690-78-8 220690-80-2
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(activity and bioavailability of succinyl hydroxamate matrix metalloproteinase inhibitors)
RN 210710-80-8 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



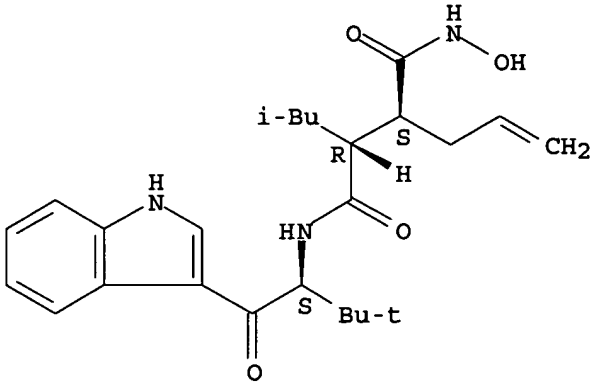
RN 210710-88-6 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



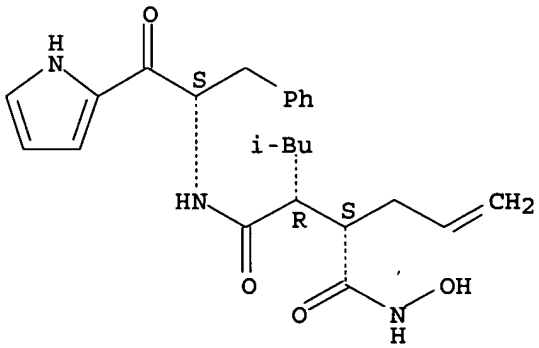
RN 210710-94-4 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-1-(1H-indol-3-ylcarbonyl)-2,2-dimethylpropyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



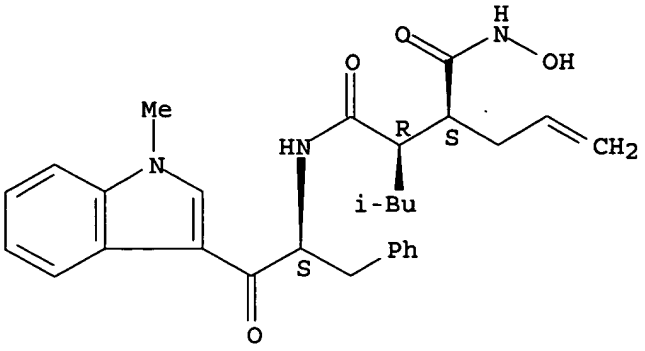
RN 210711-13-0 HCAPLUS
CN Butanediamide, N4-hydroxy-2-(2-methylpropyl)-N1-[(1S)-2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-2-yl)ethyl]-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



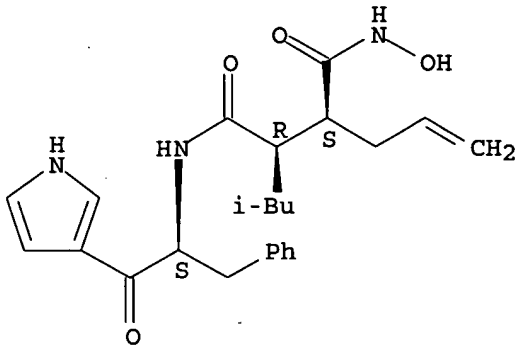
RN 220690-78-8 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1R)-2-(1-methyl-1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2S,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 220690-80-2 HCAPLUS
CN Butanediamide, N4-hydroxy-2-(2-methylpropyl)-N1-[(1R)-2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-3-yl)ethyl]-3-(2-propenyl)-, (2S,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L60 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:490622 HCAPLUS
DN 129:149247
ED Entered STN: 06 Aug 1998
TI C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion
IN Davidsen, Steven K.; Florjancic, Alan Scott; Sheppard, George S.; Giesler, Jamie R.; Xu, Lianhong; Guo, Yan; Curtin, Michael L.; Michaelides, Michael R.; Wada, Carol K.; Holms, James H.
PA Abbott Laboratories, USA
SO PCT Int. Appl., 139 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07D209-18
ICS C07C259-06; C07D207-337; C07D213-56; C07D333-24; C07D263-32; C07D277-30; C07D235-16; A61K031-165; A61K031-40; A61K031-44; A61K031-38; A61K031-42
CC 34-2 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9830541	A1	19980716	WO 1998-US142	19980107

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,

KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
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GA, GN, ML, MR, NE, SN, TD, TG

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WO 1998-US142	W	19980107			

OS MARPAT 129:149247

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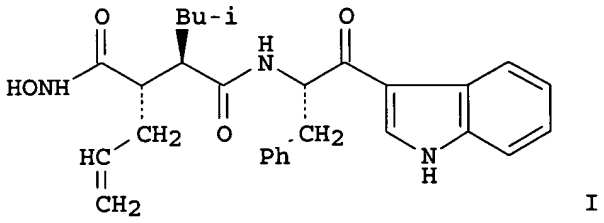


I

AB Amino acid derivs. WCOCR1R2CHR3CONHCR4R5C(:V)R6 [W = NHOH, OH; R1, R4 = H, alkyl; V = O, NOR1; R2 = H, OH, alkoxy, (un)substituted alkyl or alkenyl; R3 = (un)substituted alkyl, Ph, or phenylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkylene, cycloalkylenealkyl; R5 = (un)substituted alkyl or phenyl; R6 = (un)substituted alkyl, Ph, 1,3-benzodioxole, indolyl, pyrrolyl, imidazolyl, benzimidazolyl, pyridyl, thienyl, thiazolyl, oxazolyl, furyl, benzofuryl, benzothiazolyl] were prepared as potent inhibitors of matrix metalloproteinase. Thus, C-terminal ketone hydroxamic acid I, prepared via reaction of N-carbomethoxy-L-phenylalanine with indole and a disubstituted succinate diester, showed IC50 = 2.3 nM for inhibition of stromelysin.

ST amino acid ketone prepn inhibitor metalloproteinase; hydroxamic acid prepn inhibitor metalloproteinase; TFNA secretion inhibition hydroxamic acid

IT Amino acids, preparation
Hydroxamic acids
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

IT Tumor necrosis factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

IT **210711-81-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

IT **210710-86-4P** 210710-90-0P 210710-96-6P 210710-97-7P
210711-46-9P 210711-48-1P 210711-53-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

IT **210710-79-5P 210710-80-8P 210710-83-1P**
210710-85-3P **210710-88-6P** 210710-89-7P 210710-92-2P
210710-94-4P 210710-98-8P 210710-99-9P 210711-00-5P
210711-02-7P **210711-03-8P** 210711-04-9P 210711-05-0P
210711-07-2P 210711-08-3P **210711-13-0P** 210711-15-2P
210711-17-4P 210711-19-6P 210711-22-1P 210711-24-3P
210711-30-1P 210711-31-2P 210711-37-8P 210711-40-3P 210711-42-5P
210711-47-0P 210711-49-2P 210711-54-9P 210711-55-0P 210711-56-1P
210711-57-2P 210711-63-0P 210711-64-1P 210711-67-4P 210711-70-9P
210711-73-2P 210711-74-3P 210711-75-4P 210711-76-5P 210711-78-7P
210711-80-1P 210711-85-6P 210711-89-0P 210711-90-3P 210711-91-4P
210711-94-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

IT 79955-99-0, Stromelysin 141907-41-7, Matrix metalloproteinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

IT 63-91-2, L-Phenylalanine, reactions 95-54-5, o-Phenylenediamine, reactions 106-38-7, 4-Bromotoluene 108-30-5, reactions 108-86-1, Bromobenzene, reactions 109-97-7, Pyrrole 120-72-9, Indole, reactions 288-42-6, Oxazole 288-47-1, Thiazole 578-57-4, 2-Bromoanisole 591-80-0, 4-Pentenoic acid 603-76-9, 1-Methylindole 626-55-1, 3-Bromopyridine 646-07-1, 4-Methylvaleric acid 2177-63-1 2462-32-0 2675-79-8, 3,4,5-Trimethoxybromobenzene 2786-07-4, 2-Thienyllithium 3144-16-9 3972-65-4, 4-Bromo-tert-butylbenzene 4392-24-9, Cinnamyl bromide 5292-21-7, Cyclohexylacetic acid 5292-43-3, tert-Butyl bromoacetate 7766-51-0, 3-Butenyl iodide 10365-98-7 13734-34-4 31600-88-1 37736-82-6 47375-34-8 51987-73-6 72155-45-4, N-tert-Butoxycarbonyl-L-phenylalaninal 78887-39-5 87630-35-1, 1-Triisopropylsilylpyrrole 90719-32-7 148415-75-2 157518-71-3 162439-40-9 179533-97-2 191849-93-1 210484-09-6 210710-91-1 210710-93-3 210711-01-6 210711-68-5 210711-77-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

IT 777-93-5P 3882-09-5P 13590-42-6P 14825-82-2P 36979-87-0P
38136-29-7P, 4-Methylvaleryl chloride 41844-91-1P 83541-68-8P
85613-64-5P 87630-36-2P 95437-43-7P 100388-65-6P 101224-43-5P
103437-52-1P 111138-83-1P 112245-04-2P 113543-30-9P 131150-35-1P
131150-39-5P 143390-24-3P 143390-26-5P 144287-83-2P 166811-29-6P
169774-27-0P 178940-43-7P 202861-97-0P 210484-08-5P 210484-16-5P
210484-34-7P 210484-35-8P 210484-68-7P 210710-75-1P 210710-76-2P
210710-77-3P **210710-78-4P** 210710-81-9P 210710-82-0P
210710-84-2P 210710-87-5P 210710-95-5P 210711-06-1P 210711-09-4P
210711-10-7P 210711-11-8P **210711-12-9P** 210711-14-1P
210711-16-3P 210711-18-5P 210711-20-9P 210711-21-0P 210711-23-2P
210711-25-4P 210711-26-5P 210711-27-6P 210711-28-7P 210711-29-8P
210711-32-3P 210711-33-4P 210711-34-5P 210711-35-6P 210711-36-7P
210711-38-9P 210711-39-0P 210711-41-4P 210711-43-6P 210711-44-7P
210711-45-8P 210711-50-5P 210711-51-6P 210711-52-7P 210711-58-3P
210711-59-4P 210711-60-7P 210711-61-8P 210711-62-9P 210711-65-2P
210711-66-3P 210711-69-6P 210711-71-0P 210711-72-1P 210711-79-8P

210711-82-3P 210711-83-4P 210711-84-5P 210711-86-7P 210711-87-8P
210711-88-9P 210711-92-5P 210711-93-6P 210759-11-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

IT 210710-74-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD

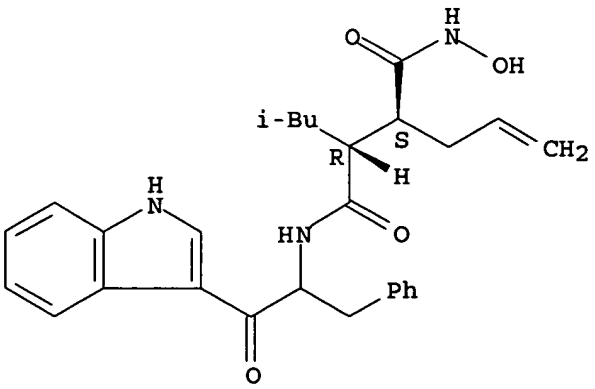
RE

(1) British Bio-Technology Ltd; EP 0498665 A 1992 HCAPLUS
(2) British Biotech Pharmaceuticals Ltd; WO 9519956 A 1995 HCAPLUS
(3) British Biotech Pharmaceuticals Ltd; WO 9519961 A 1995 HCAPLUS
(4) British Biotech Pharmaceuticals Ltd; WO 9532944 A 1995 HCAPLUS
(5) British Biotech Pharmaceuticals Ltd; WO 9633161 A 1996 HCAPLUS
(6) Celltech Ltd; EP 0489577 A 1992 HCAPLUS
(7) Celltech Ltd; WO 9324449 A 1993 HCAPLUS
(8) Celltech Ltd; US 5300501 A 1994 HCAPLUS
(9) Celltech Ltd; WO 9425435 A 1994 HCAPLUS
(10) F Hoffmann-La Roche Ag; EP 0575844 A 1993 HCAPLUS
(11) Immunex Corp; WO 9506031 A 1995 HCAPLUS

IT **210711-81-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

RN 210711-81-2 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

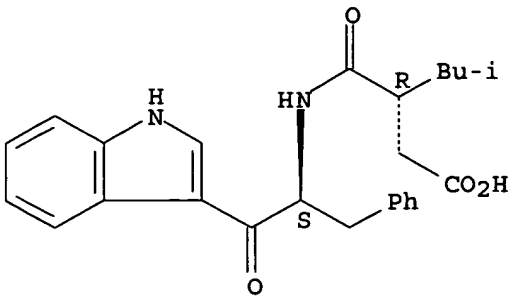


IT **210710-86-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

RN 210710-86-4 HCAPLUS
CN Hexanoic acid, 3-[[[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-5-methyl-, (3R)- (9CI) (CA INDEX

NAME)

Absolute stereochemistry. Rotation (+).

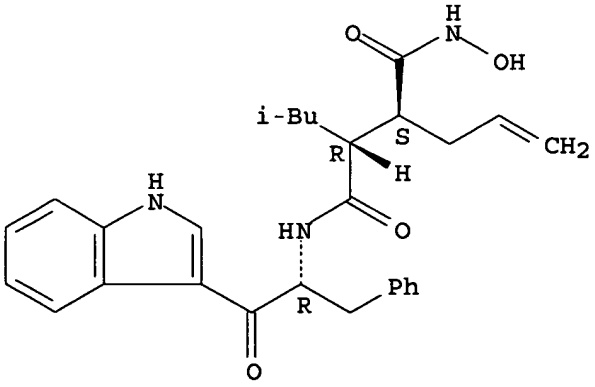


IT **210710-79-5P 210710-80-8P 210710-83-1P**
210710-88-6P 210710-94-4P 210711-03-8P
210711-13-0P 210711-17-4P 210711-94-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)

RN 210710-79-5 HCAPLUS

CN Butanediamide, N4-hydroxy-N1-[(1R)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

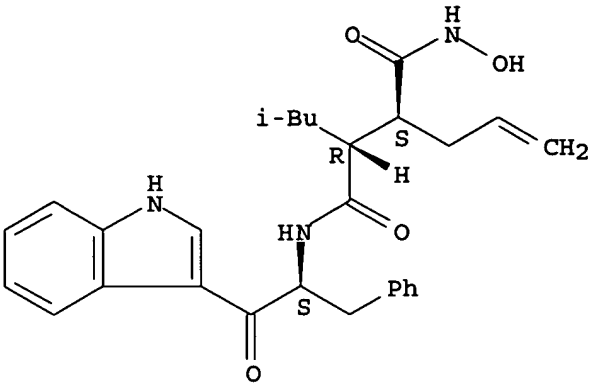
Absolute stereochemistry. Rotation (+).



RN 210710-80-8 HCAPLUS

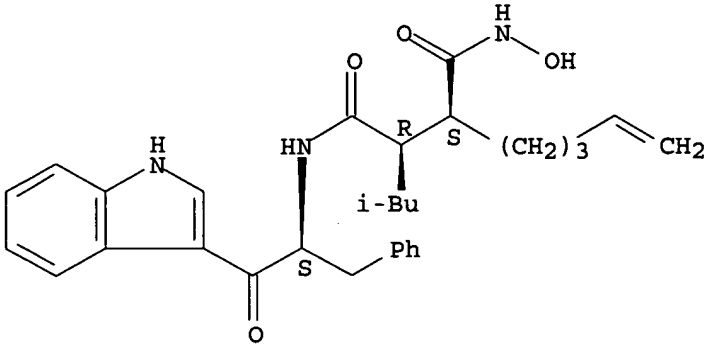
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



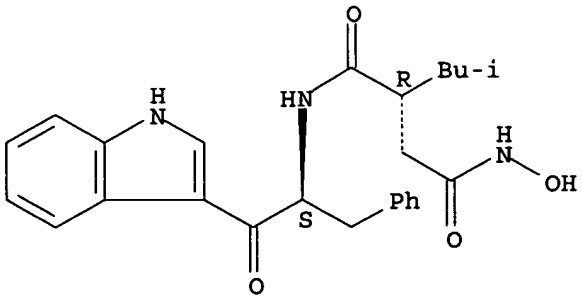
RN 210710-83-1 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(4-pentenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



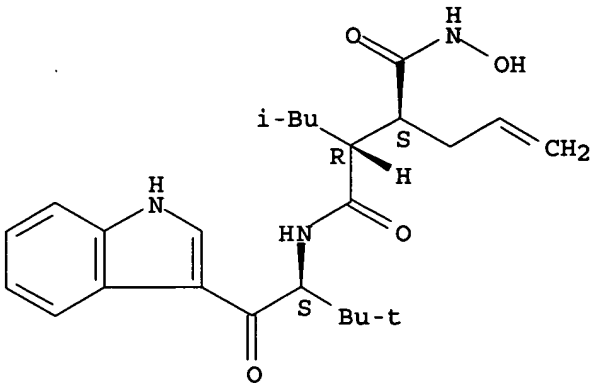
RN 210710-88-6 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



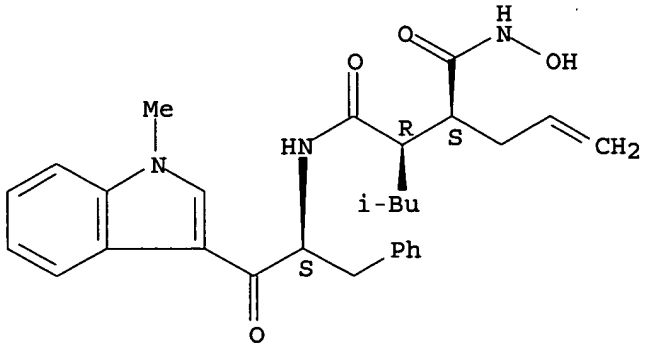
RN 210710-94-4 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-1-(1H-indol-3-ylcarbonyl)-2,2-dimethylpropyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



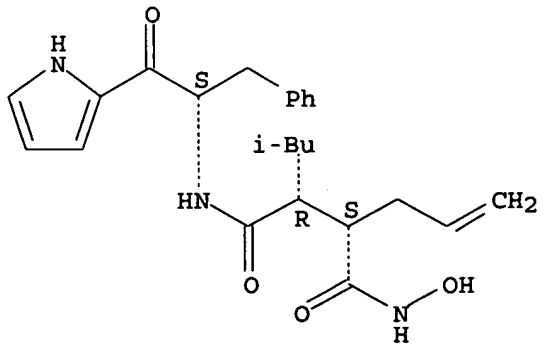
RN 210711-03-8 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1-methyl-1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



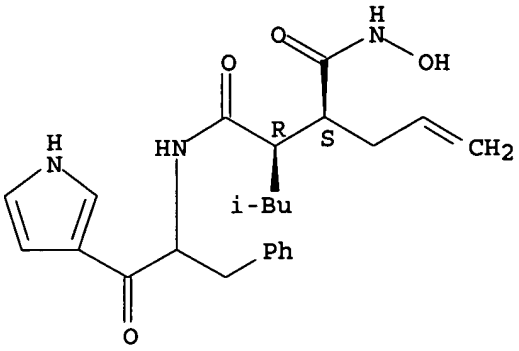
RN 210711-13-0 HCAPLUS
CN Butanediamide, N4-hydroxy-2-(2-methylpropyl)-N1-[(1S)-2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-2-yl)ethyl]-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



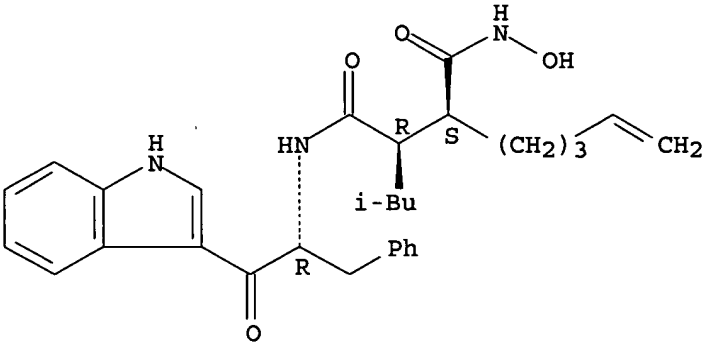
RN 210711-17-4 HCAPLUS
CN Butanediamide, N4-hydroxy-2-(2-methylpropyl)-N1-[2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-3-yl)ethyl]-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



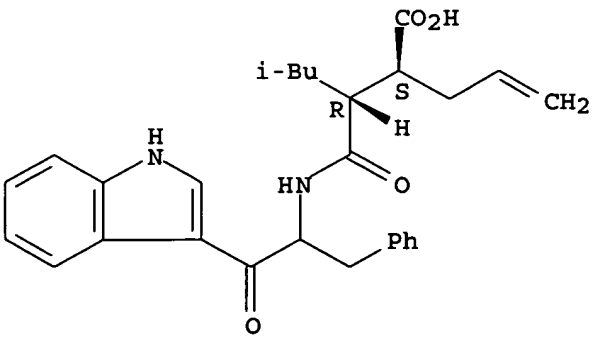
RN 210711-94-7 HCAPLUS
CN Butanediamide, N4-hydroxy-N1-[(1R)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(4-pentenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **210710-78-4P 210711-12-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(C-terminal ketone hydroxamic acid inhibitors of matrix metalloproteinases and TNFA secretion)
RN 210710-78-4 HCAPLUS
CN Hexanoic acid, 3-[[[2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-5-methyl-2-(2-propenyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

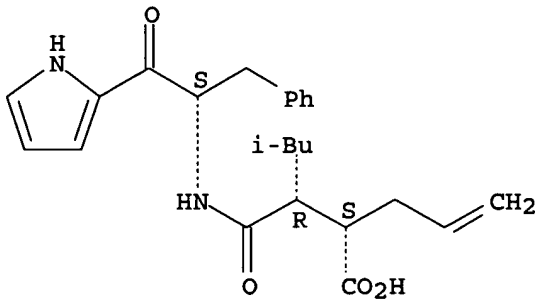
Absolute stereochemistry.



NO

RN 210711-12-9 HCAPLUS
CN Hexanoic acid, 5-methyl-3-[[[(1S)-2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-2-yl)ethyl]amino]carbonyl]-2-(2-propenyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> fil uspatall
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CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 12:26:19 ON 03 JUN 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitstr tot

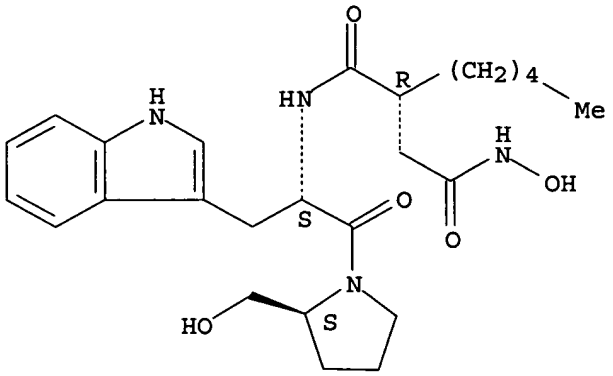
L61 ANSWER 1 OF 4 USPATFULL on STN
AN 2004:25241 USPATFULL
TI Asymmetric synthesis of (S,S,R)-(-)-actinonin and its analogs and uses therefor
IN Bornmann, William G., New York, NY, UNITED STATES
Sirotnak, Francis, New York, NY, UNITED STATES
Scher, Howard, Tenefly, NJ, UNITED STATES
Vidal, Ephraim, Cincinnati, OH, UNITED STATES
Borelle, Christopher, New York, NY, UNITED STATES
Scheinberg, David, New York, NY, UNITED STATES
PA Sloan-Kettering Institute for Cancer Research (U.S. corporation)
PI US 2004019083 A1 20040129
AI US 2003-603953 A1 20030625 (10)
RLI Division of Ser. No. US 2002-102593, filed on 19 Mar 2002, PENDING
PRAI US 2001-277116P 20010319 (60)
DT Utility
FS APPLICATION
LREP Benjamin Aaron Adler, Ph.D., J.D., Adler & Associates, 8011 Candle Lane, Houston, TX, 77071
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 1626
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods for the asymmetric synthesis of (S,S,R)-(-)-actinonin and its analogs and the compounds thereby synthesized having a structural formula: ##STR1##

where R.sup.1 is an optionally substituted or halogenated alkyl, aryl, heteroalkyl or heteroaryl amine, said R.sup.1 further comprising a cyclic or bicyclic structure; R.sup.2 is methyl, CH.sub.2CH.sub.3, (CH.sub.2).sub.2CH.sub.3, C(CH.sub.3).sub.3, phenyl, 3,4-dichlorophenyl, biphenyl, benzyl, 4-hydroxybenzyl, piperidine, N-Boc-4-piperidine,

CH.sub.2-(N-Boc-4-piperidine), 4-tetrahydropyran, CH.sub.2-4-tetrahydropyran, 3-methyl indolyl, 2-naphthyl, 3-pyridyl, 4-pyridyl, 3-thienyl; R.sup.3 is R.sup.2 or C.sub.3-8alkyl, R.sup.4 is C.sub.1-3alkyl; and R.sup.5 is NH.sub.2, OH, NHOH, NHOCH.sub.3, N(CH.sub.3)OH, N(CH.sub.3)OCH.sub.3, NHCH.sub.2CH.sub.3, NH(CH.sub.2CH.sub.3), NHCH.sub.2(2,4-(OCH3).sub.2Ph, NHCH.sub.2(4-NO.sub.2)Ph, NHN(CH.sub.3).sub.2, proline, or 2-hydroxymethyl pyrrolidine. Additionally, a method for the treatment of a neoplastic disease or for the inhibition of tumor cell growth each comprising the step of administering to an individual in need of such treatment a pharmacologically effective dose of the compounds of the present invention are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **460754-50-1P**
(asym. synthesis of analogs and derivs. of actinonin as tumor cell growth inhibitors)
RN 460754-50-1 USPATFULL
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-2-pentyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L61 ANSWER 2 OF 4 USPATFULL on STN
AN 2002:344426 USPATFULL
TI Asymmetric synthesis of (S,S,R)-(-)-actinonin and its analogs and uses therefor
IN Bornmann, William G., New York, NY, UNITED STATES
Sirotnak, Francis, New York, NY, UNITED STATES
Scher, Howard, Tenefly, NJ, UNITED STATES
Vidal, Ephraim, Cincinnati, OH, UNITED STATES
Borella, Christopher, New York, NY, UNITED STATES
Scheinberg, David, New York, NY, UNITED STATES
PI US 2002198156 A1 20021226
US 6660741 B2 20031209
AI US 2002-102593 A1 20020319 (10)
PRAI US 2001-277116P 20010319 (60)
DT Utility
FS APPLICATION
LREP Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 1663
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods for the asymmetric synthesis of (S,S,R)-(-)-actinonin and its analogs and the compounds thereby synthesized having a structural formula: ##STR1##

where R.sup.1 is an optionally substituted or halogenated alkyl, aryl, heteroalkyl or heteroaryl amine, said R.sup.1 further comprising a cyclic or bicyclic structure; R.sup.2 is methyl, CH.sub.2CH.sub.3, (CH.sub.2).sub.2CH.sub.3, C(CH.sub.3).sub.3, phenyl, 3,4-dichiorophenyl, biphenyl, benzyl, 4-hydroxybenzyl, piperidine, N-Boc-4-piperidine, CH.sub.2-(N-Boc-4-piperidine), 4-tetrahydropyran, CH.sub.2-4-tetrahydropyran, 3-methyl indolyl, 2-naphthyl, 3-pyridyl, 4-pyridyl, 3-thienyl; R.sup.3 is R.sup.2 or C.sub.3-8alkyl, R.sup.4 is C.sub.1-3alkyl; and R.sup.5 is NH.sub.2, OH, NHOH, NHOCH.sub.3, N(CH.sub.3)OH, N(CH.sub.3)OCH.sub.3, NHCH.sub.2CH.sub.3, NH(CH.sub.2CH.sub.3), NHCH.sub.2(2,4-(OCH3).sub.2Ph, NHCH.sub.2(4-NO.sub.2)Ph, NHN(CH.sub.3).sub.2, proline, or 2-hydroxymethyl pyrrolidine. Additionally, a method for the treatment of a neoplastic disease or for the inhibition of tumor cell growth each comprising the step of administering to an individual in need of such treatment a pharmacologically effective dose of the compounds of the present invention are provided.

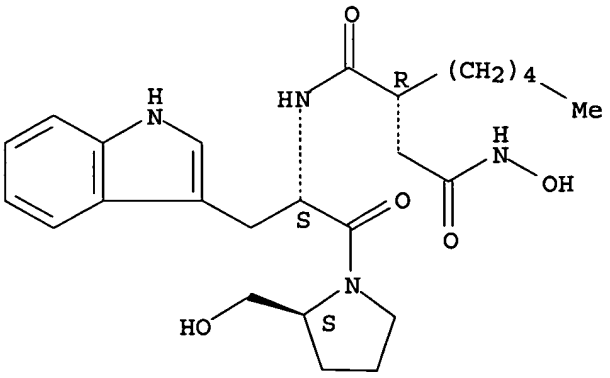
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **460754-50-1P**
(asym. synthesis of analogs and derivs. of actinonin as tumor cell growth inhibitors)

RN 460754-50-1 USPATFULL

CN Butanediamide, N4-hydroxy-N1-[(1S)-2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-2-pentyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L61 ANSWER 3 OF 4 USPATFULL on STN

AN 1999:146610 USPATFULL

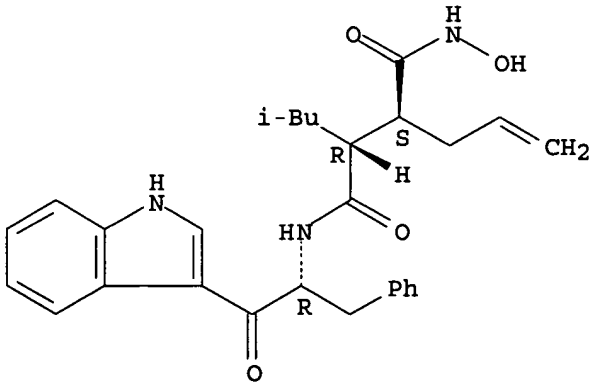
TI C-terminal ketone inhibitors of matrix metalloproteinases and TNFα secretion

IN Davidsen, Steven K., Libertyville, IL, United States
Florjancic, Alan S., Lake Bluff, IL, United States
Sheppard, George S., Wilmette, IL, United States
Giesler, Jamie R., Oak Creek, WI, United States
Xu, Lianhong, Libertyville, IL, United States
Guo, Yan, Gurnee, IL, United States
Curtin, Michael L., Kenosha, WI, United States
Michaelides, Michael R., Gurnee, IL, United States
Wada, Carol K., Grayslake, IL, United States
Holms, James H., Gurnee, IL, United States

PA Abbott Laboratories, Abbott Park, IL, United States (U.S. corporation)
PI US 5985911 19991116
AI US 1997-992578 19971217 (8)
PRAI US 1997-35781P 19970107 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Gerstl, Robert
LREP Steele, Gregory W.
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2976
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB C-terminal compounds of formula ##STR1## are potent inhibitors of matrix metalloproteinase and are useful in the treatment of diseases in which matrix metalloproteinase play a role. Also disclosed are matrix metalloproteinase inhibiting compositions and a method of inhibiting matrix metalloproteinase in a mammal.

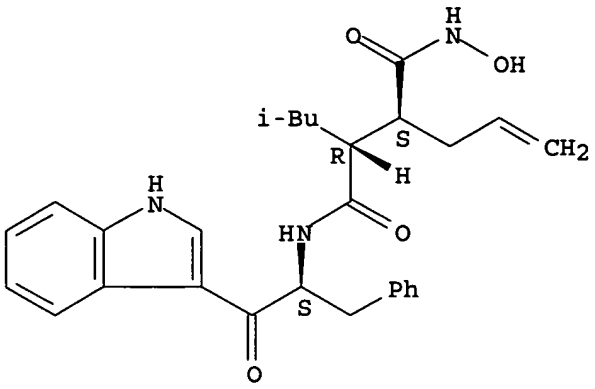
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **210710-79-5P 210710-80-8P 210710-83-1P**
210710-86-4P 210710-88-6P 210710-94-4P
210711-13-0P 210711-17-4P 210711-81-2P
250152-85-3P
(preparation of [(aroylalkyl)amino]succinylhydroxamic acids and analogs as inhibitors of matrix metalloproteinases and TNFα secretion)
RN 210710-79-5 USPATFULL
CN Butanediamide, N4-hydroxy-N1-[(1R)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



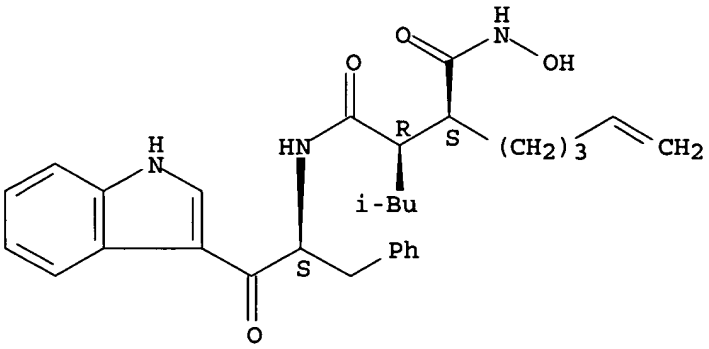
RN 210710-80-8 USPATFULL
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



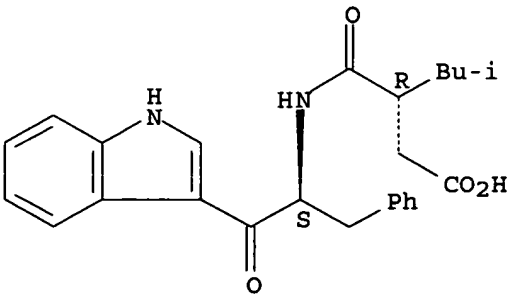
RN 210710-83-1 USPATFULL
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(4-pentenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



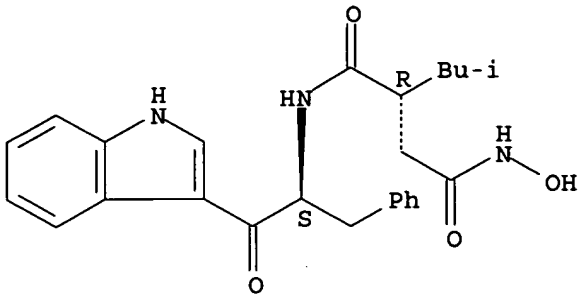
RN 210710-86-4 USPATFULL
CN Hexanoic acid, 3-[[[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-5-methyl-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



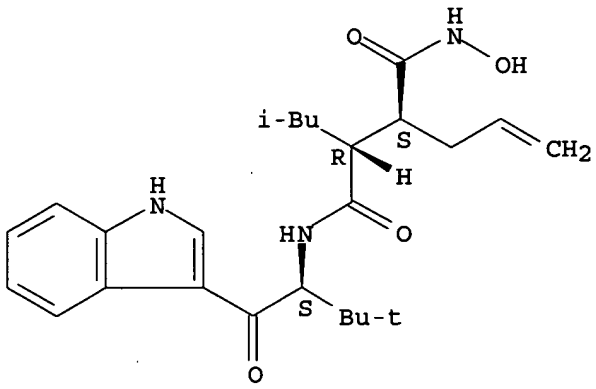
RN 210710-88-6 USPATFULL
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



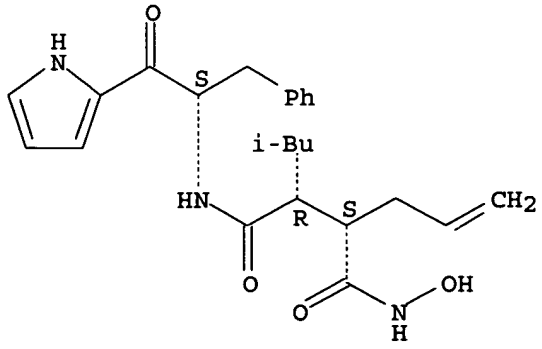
RN 210710-94-4 USPATFULL
CN Butanediamide, N4-hydroxy-N1-[(1S)-1-(1H-indol-3-ylcarbonyl)-2,2-dimethylpropyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



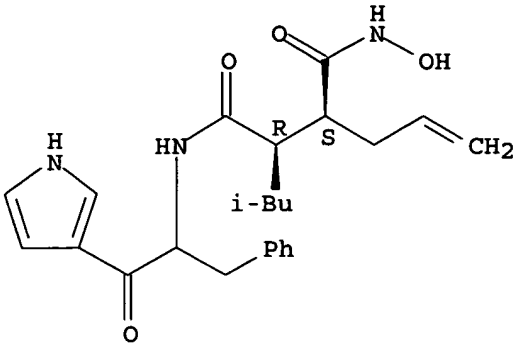
RN 210711-13-0 USPATFULL
CN Butanediamide, N4-hydroxy-2-(2-methylpropyl)-N1-[(1S)-2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-2-yl)ethyl]-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



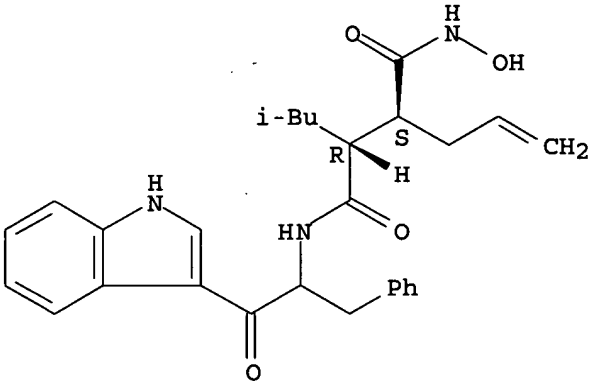
RN 210711-17-4 USPATFULL
CN Butanediamide, N4-hydroxy-2-(2-methylpropyl)-N1-[2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-3-yl)ethyl]-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



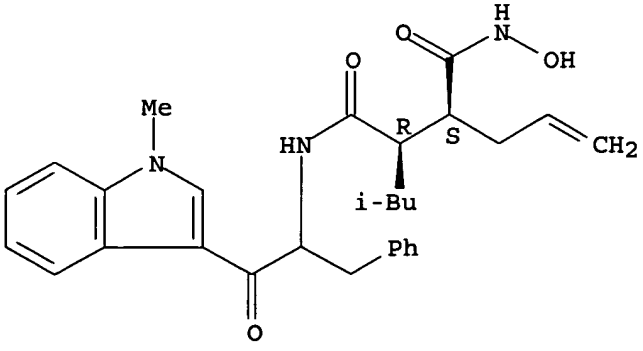
RN 210711-81-2 USPATFULL
CN Butanediamide, N4-hydroxy-N1-[2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 250152-85-3 USPATFULL
CN Butanediamide, N4-hydroxy-N1-[2-(1-methyl-1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-(2-propenyl)-, (2R,3S)- (9CI) (CA INDEX NAME)

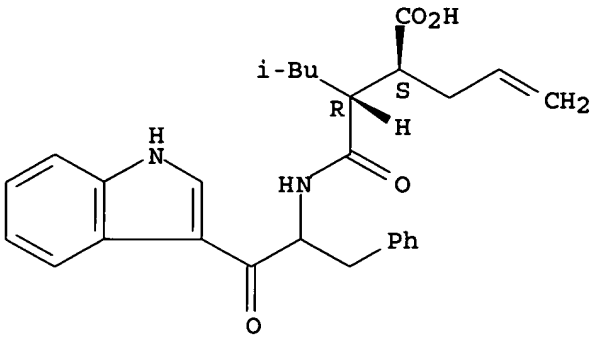
Absolute stereochemistry.



IT **210710-78-4P 210711-12-9P**
(preparation of [(aroylalkyl)amino]succinylhydroxamic acids and analogs as inhibitors of matrix metalloproteinases and TNFα secretion)
RN 210710-78-4 USPATFULL

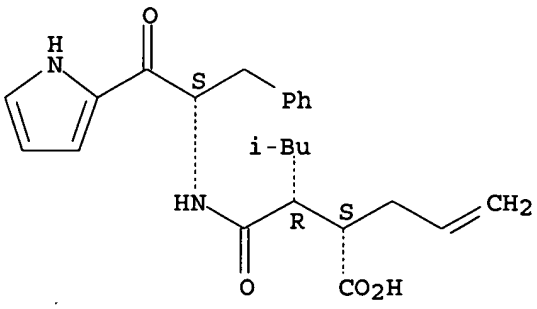
CN Hexanoic acid, 3-[[[2-(1H-indol-3-yl)-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-5-methyl-2-(2-propenyl)-, (2S,3R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 210711-12-9 USPATFULL
CN Hexanoic acid, 5-methyl-3-[[[(1S)-2-oxo-1-(phenylmethyl)-2-(1H-pyrrol-2-yl)ethyl]amino]carbonyl]-2-(2-propenyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



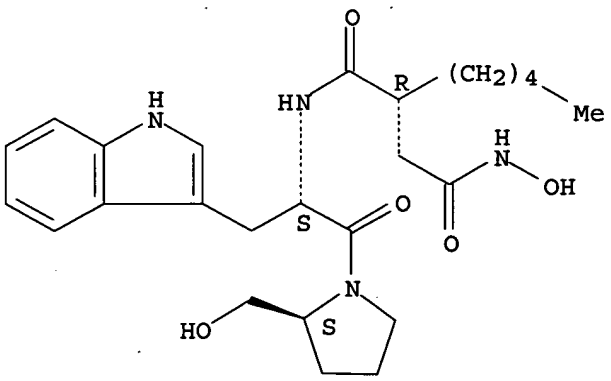
L61 ANSWER 4 OF 4 USPAT2 on STN
AN 2002:344426 USPAT2
TI Asymmetric synthesis of (S,S,R)-(-)-actinonin and its analogs and uses therefor
IN Bornmann, William G., New York, NY, United States
Sirotnak, Francis, New York, NY, United States
Scher, Howard, Tenefly, NJ, United States
Vidal, Ephraim, Cincinnati, OH, United States
Borella, Christopher, New York, NY, United States
Scheinberg, David, New York, NY, United States
PA Sloan-Kettering Institute for Cancer Research, New York, NY, United States (U.S. corporation)
PI US 6660741 B2 20031209
AI US 2002-102593 20020319 (10)
PRAI US 2001-277116P 20010319 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: McKane, Joseph K.; Assistant Examiner: Shiao, Robert
LREP Adler, Benjamin Aaron
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 9 Drawing Figure(s); 7 Drawing Page(s)

LN.CNT 1569
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods for the asymmetric synthesis of (S,S,R)-(-)-actinonin and its analogs and the compounds thereby synthesized having a structural formula: ##STR1##

where R.sup.1 is an optionally substituted or halogenated alkyl, aryl, heteroalkyl or heteroaryl amine, said R.sup.1 further comprising a cyclic or bicyclic structure; R.sup.2 is methyl, CH.sub.2CH.sub.3, (CH.sub.2).sub.2CH.sub.3, C(CH.sub.3).sub.3, phenyl, 3,4-dichiorophenyl, biphenyl, benzyl, 4-hydroxybenzyl, piperidine, N-Boc-4-piperidine, CH.sub.2-(N-Boc-4-piperidine), 4-tetrahydropyran, CH.sub.2-4-tetrahydropyran, 3-methyl indolyl, 2-naphthyl, 3-pyridyl, 4-pyridyl, 3-thienyl; R.sup.3 is R.sup.2 or C.sub.3-8alkyl, R.sup.4 is C.sub.1-3alkyl; and R.sup.5 is NH.sub.2, OH, NHOH, NHOCH.sub.3, N(CH.sub.3)OH, N(CH.sub.3)OCH.sub.3, NHCH.sub.2CH.sub.3, NH(CH.sub.2CH.sub.3), NHCH.sub.2(2,4-(OCH3).sub.2Ph, NHCH.sub.2(4-NO.sub.2)Ph, NHN(CH.sub.3).sub.2, proline, or 2-hydroxymethyl pyrrolidine. Additionally, a method for the treatment of a neoplastic disease or for the inhibition of tumor cell growth each comprising the step of administering to an individual in need of such treatment a pharmacologically effective dose of the compounds of the present invention are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **460754-50-1P**
(asym. synthesis of analogs and derivs. of actinonin as tumor cell growth inhibitors)
RN 460754-50-1 USPAT2
CN Butanediamide, N4-hydroxy-N1-[(1S)-2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-2-pentyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=>

Shiao

L3 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:635397 CAPLUS
DOCUMENT NUMBER: 136:215000
TITLE: Dipeptidyl peptidase IV/CD26 and aminopeptidase N/CD13 in regulation of the immune response
AUTHOR(S): Ansorge, Siegfried; Kahne, Thilo; Lendeckel, Uwe; Reinhold, Dirk; Neubert, Klaus; Steinbrecher, Andreas; Brocke, Steffan
CORPORATE SOURCE: Department of Internal Medicine, Institute of Experimental Internal Medicine, Otto von Guericke University Magdeburg, Magdenburg, D-39120, Germany
SOURCE: International Congress Series (2001), 1218(Cell-Surface Aminopeptidases: Basic and Clinical Aspects), 85-94
CODEN: EXMDA4; ISSN: 0531-5131
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review. The ectoenzymes dipeptidyl peptidase IV (DPPIV, EC 3.4.14.5; CD26) and aminopeptidase N (APN, EC 3.4.11.2; CD13) have been shown to play a crucial role in T lymphocyte activation. Obviously they represent a new type of costimulatory T cell structure. Potential ligands as specific inhibitors of APN (e.g., **actinonin**, probestin) or DPPIV (Lys[Z(NO2)]-thiazolidide or -pyrrolidide) suppress DNA synthesis as well as cytokine production (APN: IL-2, DPPIV: IL-2 IL-10, IL-12, IFN-γ) of stimulated T cells. This can be explained, at least in part, by an induction of TGF-β1, an immunosuppressive cytokine, accompanied by a decrease of DPPIV mRNA and a blockade of the cell cycle at the restriction point G1/S via p27kip. DPPIV inhibitors provoke tyrosine phosphorylation and p38 MAP kinase activation and exhibit blocking effects on the anti-CD3-induced signal cascades including calcium mobilization, PKB activation as well as MEK1/2 activation. On the other hand, APN inhibitors provoke a dramatic increase of the protooncogene Wnt-5a and a marked reduction of glycogen synthase kinase-3β (GSK-3β). Elevated nos. of CD26+ T cells were described in patients with autoimmune diseases such as multiple sclerosis or rheumatoid arthritis. The expression of DPPIV/CD26 in resting cell clones derived from patients with multiple sclerosis was found to be 3- to 4-fold higher than on resting peripheral blood T cells from healthy persons. DPPIV inhibitors suppress DNA synthesis, and IFN-γ, IL-4 and TNF-α production of those antigen-stimulated T cell clones in a dose-dependent manner. Moreover, in the murine exptl. autoimmune encephalomyelitis (EAE), a well characterized CD4+ T cell-mediated autoimmune **disease** leading to CNS inflammation and demyelination, administration of a DPPIV/CD26 inhibitor in vivo prevented clin. and neuropathol. signs of the EAE and suppressed ongoing **disease**. These data support the idea of a new anti-inflammatory peptidase-based immunosuppressive (PBDS) approach for the treatment of autoimmune diseases.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT